This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-12. (Canceled)

13. (New) An image sensing apparatus comprising:

an image sensing element that outputs a charge signal in accordance with a light amount of an object image formed on a light-receiving surface;

a light-shielding unit that shields said image sensing element from incident light;

a calculation unit that calculates a compensation amount for compensating a loss in exposure amount for said image sensing element caused by delay in closing of said light-shielding unit;

a setting unit that sets an exposure period of said image sensing element;

a control unit that changes the set exposure period based on the compensation amount calculated by said calculation unit if the exposure period is longer than a predetermined period, and changes a gain to be applied to the charge signal based on the compensation amount calculated by said calculation unit if the exposure period is equal to or shorter than the predetermined period.

14. (New) The image sensing apparatus according to claim 13, wherein said calculation unit calculates the compensation amount for exposure period if the exposure period is

longer than the predetermined period, and calculates the compensation amount for gain if the exposure period is equal to or shorter than the predetermined period.

15. (New) The image sensing apparatus according to claim 13, wherein, if the set exposure period is longer than the predetermined period and if the compensation amount calculated by said calculation unit is greater than a predetermined amount, said calculation unit calculates a second compensation amount for gain to be applied to the charge signal based on an excess of the compensation amount over the predetermined amount, and said control unit changes the exposure period based on the predetermined amount and changes the gain based on the second compensation amount.

16. (New) The image sensing apparatus according to claim 13, wherein, if the set exposure period is equal to or shorter than the predetermined period and if the compensation amount calculated by said calculation unit is greater than a predetermined amount, said calculation unit calculates a second compensation amount for exposure period based on an excess of the compensation amount over the predetermined amount, and said control unit changes the gain to be applied to the charge signal based on the predetermined amount and changes the exposure period based on the second compensation amounts.

17. (New) The image sensing apparatus according to claim 13 further comprising an image sensing mode setting unit that sets an image sensing mode,

wherein even if the image sensing mode set by said image sensing mode setting unit is an image sensing mode of controlling exposure by keeping an exposure period set by said

setting unit, said control unit changes the set exposure period based on the compensation amount calculated by said calculation unit if the exposure period is longer than a predetermined period.

18. (New) A control method for an image sensing apparatus having an image sensing element that outputs a charge signal in accordance with a light amount of an object image formed on a light-receiving surface and a light-shielding unit that shields said image sensing element from incident light, said method comprising:

calculating a compensation amount for compensating a loss in exposure amount for said image sensing element caused by delay in closing of said light-shielding unit;

setting an exposure period of said image sensing element;

changing the set exposure period based on the calculated compensation amount if the exposure period is longer than a predetermined period, and changing a gain to be applied to the charge signal based on the calculated compensation amount if the exposure period is equal to or shorter than the predetermined period.